Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A blood sugar level measuring apparatus comprising:

a measuring portion for obtaining a plurality of measurement values related to a body surface and a measurement environment;

a selecting means for selecting an able-bodied person or a diabetic patient; and

a calculation portion for calculating a blood sugar level based on the plurality of measurement values obtained in the measuring portion and the result of selection by the selecting means.

2. (Original) The blood sugar level measuring apparatus according to claim 1, wherein the selecting means comprises a display portion for prompting the selection of either an able-bodied person or a diabetic patient.

3. (Currently Amended) The blood sugar level measuring apparatus according to claim 1, wherein the selecting means comprises an input operating portion provided for the able-bodied person ~~and~~ or diabetic patient individually.

4. (Currently Amended) The blood sugar level measuring apparatus according to claim 1, further comprising a storage portion in which a plurality of regression functions are stored, wherein the calculation portion reads a regression function

corresponding to the result of selection from the storage portion to calculate ~~a~~ the blood sugar level.

5. (Currently Amended) The blood sugar level measuring apparatus according to claim 1, further comprising a storage portion in which a plurality of regression functions and a mean value and a standard deviation of a plurality of parameters corresponding to individual regression functions are stored, wherein the calculation portion reads a regression function corresponding to the result of selection, the mean value of the parameters and the standard deviation from the storage portion and then calculates ~~a~~ the blood sugar level.

6. (Original) A blood sugar level measuring apparatus comprising:

an input means for entering an input identifying an able-bodied person or a diabetic patient;

a heat amount measuring portion for measuring a plurality of temperatures derived from a body surface in order to obtain information used for calculating the amount of transfer of heat by convection and the amount of transfer of heat by radiation, which relate to the dissipation of heat from the body surface;

an oxygen amount measuring portion for obtaining information relating to the amount of oxygen in blood;

a storage portion in which a function for able-bodied persons and a function for diabetic patients are individually stored, the functions relating parameters corresponding to the plurality of temperatures and the blood oxygen amount to blood sugar levels;

a calculation portion for converting a plurality of measurement values inputted from the heat amount measuring portion and the oxygen amount measuring portion into the parameters individually, and applying the parameters to the function stored in the storage portion for the able-bodied persons or for the diabetic patients, depending on the identifying input entered via the input means, in order to calculate a blood sugar level; and

a display portion for displaying the blood sugar level calculated by the calculation portion.

7. (Original) The apparatus according to claim 6, wherein the storage portion stores a regression function for able-bodied persons and another regression function for diabetic patients, and wherein the calculation portion calculates a blood sugar level using the regression function corresponding to the identifying input.

8. (Original) The apparatus according to claim 6, wherein the storage portion stores a regression function for able-bodied persons, a regression function for diabetic patients, and a mean value and standard deviation of a plurality of parameters included in each regression function, and wherein the calculation portion calculates a blood sugar level using a regression function corresponding to the identifying input and a mean value and standard deviation associated with that regression function.

9. (Original) The blood sugar level measuring apparatus according to claim 6, wherein the oxygen amount measuring portion comprises a blood flow volume measuring portion for obtaining information relating to the volume of blood flow, and

an optical measuring portion for obtaining the hemoglobin concentration and hemoglobin oxygen saturation in blood.

10. (Currently Amended) A blood sugar level measuring method comprising the steps of:

obtaining a plurality of measurement values relating to a body surface and a measurement environment;

obtaining ~~the~~ a type identifying an able-bodied person or a diabetic patient; and

calculating a blood sugar level using the obtained plurality of measurement values and a regression function for either able-bodied persons or diabetic patients chosen based on the obtained type identifying an able-bodied person or a diabetic patient.

11. (Original) The method according to claim 10, wherein the step of calculating blood sugar level comprises:

obtaining a plurality of parameters from the obtained plurality of measurement values;

normalizing the obtained plurality of parameters with a mean value and standard deviation corresponding to the type, i.e. whether an able-bodied person or a diabetic patient; and

calculating a blood sugar level by applying the normalized plurality of parameters to the regression function corresponding to the able-bodied person or the diabetic patient.